

Table H-3: 2001 CH<sub>4</sub> Emissions from Petroleum Refining

Activity/Equipment	Emission Units Factor	Activity Factor Units	Emissions (Bcf/yr)
<b>Vented Emissions</b>			<b>1.223</b>
Tanks	20.6 scfCH <sub>4</sub> /Mbbl	1,941 Mbbl/cd heavy crude feed	0.015
System Blowdowns	137 scfCH <sub>4</sub> /Mbbl	15,128 Mbbl/cd refinery feed	0.755
Asphalt Blowing	2,555 scfCH <sub>4</sub> /Mbbl	485 Mbbl/cd production	0.453
<b>Fugitive Emissions</b>			<b>0.091</b>
Fuel Gas System	439 McfCH <sub>4</sub> /refinery/yr	153 Refineries	0.067
Floating Roof Tanks	587 scf CH <sub>4</sub> /floating roof tank/yr.	767 No. of floating roof tanks	0.000
Wastewater Treating	1.88 scfCH <sub>4</sub> /Mbbl	15,128 Mbbl/cd refinery feed	0.010
Cooling Towers	2.36 scfCH <sub>4</sub> /Mbbl	15,128 Mbbl/cd refinery feed	0.013
<b>Combustion Emissions</b>			<b>0.092</b>
Atmospheric Distillation	3.61 scfCH <sub>4</sub> /Mbbl	15,352 Mbbl/cd refinery feed	0.020
Vacuum Distillation	3.61 scfCH <sub>4</sub> /Mbbl	6,875 Mbbl/cd feed	0.009
Thermal Operations	6.02 scfCH <sub>4</sub> /Mbbl	2,055 Mbbl/cd feed	0.005
Catalytic Cracking	5.17 scfCH <sub>4</sub> /Mbbl	5,194 Mbbl/cd feed	0.010
Catalytic Reforming	7.22 scfCH <sub>4</sub> /Mbbl	3,239 Mbbl/cd feed	0.009
Catalytic Hydrocracking	7.22 scfCH <sub>4</sub> /Mbbl	1,362 Mbbl/cd feed	0.004
Hydrorefining	2.17 scfCH <sub>4</sub> /Mbbl	1,825 Mbbl/cd feed	0.001
Hydrotreating	6.50 scfCH <sub>4</sub> /Mbbl	8,382 Mbbl/cd feed	0.020
Alkylation/Polymerization	12.6 scfCH <sub>4</sub> /Mbbl	1,065 Mbbl/cd feed	0.005
Aromatics/Isomeration	1.80 scfCH <sub>4</sub> /Mbbl	934 Mbbl/cd feed	0.001
Lube Oil Processing	0.00 scfCH <sub>4</sub> /Mbbl	162 Mbbl/cd feed	0.000
Engines	0.006 scfCH <sub>4</sub> /hp-hr	1,467 MMhp-hr/yr	0.008
Flares	0.189 scfCH <sub>4</sub> /Mbbl	15,128 Mbbl/cd refinery feed	0.001
<b>Total</b>			<b>1.406</b>